G.R.S.:IX—5]

Previous references.
1 to 137-20-1 to 25

192

File No. 89-2
Serial Nos. 1 to 4

Later references.
1 to 89-23-5 to 6
SA 77.25.1 & 2.
SA 57.26.-1

GENERAL AND REVENUE SECRETARIAT.

✓

Serial Nos. 4

Part B for June 1924

SUBJECT

Commutation of pension.

To.
The Compt.
No. FL 5376 D/ 27-3-1924
Revises the table of rates for -

To George King Esqr. F.F.A.
Consulting Actuary, Londo
No. FL. 6786 of 12-6-1924.
Fds: ten printed copies of h
report on the above in mysore.

G. R. S. III-2]

General and Revenue
Secretariat.

S of A File No. 89 of 1923

Serial No.

1) From the compt. – Pen. 3097 17/3/23 – forwards the report of Mr. George King regarding ~~to~~ commutation of pension.

2) From the same – Pen. 3108, 17/3 – Requests orders of grant for the payment of a fee of ₹ 162/1 to Mr. King.

The file is put up.

Dft. sanctioning a fee of ₹ 162/15- to Mr. King is subd. to

61 Mr. King ~~was~~ requires early payme
243. The case will be worked up after issue of letter.

In orders. Dft. for Cons: S.

SNR 21/3

Fair Copy

When the system of commuting pensions was ad
ed by us, we found that very probably the table which was guiding us required revision in the di-
rection of reducing the amounts payable. As Mr. King, the consulting Actuary in London, had value
our Insurance Fund and gathered valuable statisti of mortality among our officers, it was considere desirable to obtain his expert opinion in regard the reliability of the tables we were using and al

2[illegible] MAR. 1924
No. 6903.

NOTE—Contn. sheet.

also to request him to regise it if any revision was found necessary.

Accordingly, with the permission of Sir M. Kantaraj Urs, Mr. King was entrusted with this work and special arrangements were made to furnish him with all the ~~debtor~~ data from our pension audit registers to enable him to advise us regarding the table. The ~~xxxx~~ quantity of work to be done by him could not be accurately gauge and it was, therefore, not possible to have the fee payable to him fixed before the work was entrusted to him.

Mr. King's report has now been received and as suspected by us, he has found that it is necessary to revise the table and for ages from 40 to 68, he has reduced the commuted values payable. The new tabl ~~will~~ may be adopted by us when we resume to commute pensions. I may add that the table which we were following is the same as that of the Government of India and Mr. King's investigations have proved that even the table of the Government of India ~~also~~ required revision.

Informed

Mr. King has asked for a fee of £162-15-0 and its payment may be authorised. As it was not known when the claim for payment would be made, no provision was made on this account in the current year's Budget. The charge may be considered as covered by an equivalent additional grant.

[illegible]'S OFFICE.
2 [illegible] MAR. 1924
6903

NOTE—Contn. sheet.

Dewan)

I agree

Issue orders

[illegible]

23-3-24

3

Commutation of Pensions

G. R. S. III-2]

General and Revenue
Secretariat.

Actuarial Valuation

874 File No. 88. of 1923

Serial No.

Please revise draft

25/3

Dft. Fr. Subd

65/25/3 (Fl. Secy)

26/3/24

Doorgman
26/3/24

27/3/24

The C[illegible] has the printed [illegible] Please arrange [illegible]

3.) The Govt. 537.6 R, 27/3 approve of the new table & sanction the fee to the Actuary.

A.A.C. informed.

Printed copies have been received. In his letter d. 20/5/24, Mr. King has requested for some spare copies, & he has also suggested the forwarding of a copy to the India Office.

Dft. subd. with a spare copy of the printed report

D

F

65/25/5 (Fl. Secy)

24/5/24

10 copies may be sent to Mr King. A draft to Secy may be put up sending 2 copies & asking that they may be sent to India Office & stating circs in which they are sent. Mr King to be informed that 2 copies have been sent to India Office [illegible]

NOTE—Contn. sheet.

G. R. S. III-21

General and Revenue
Secretariat.

S & a File No. 89 of 1923

Serial No.

Two Dfts. subd.

E.S.
5/6 (for Secy)

Issue
7/6/24

NOTE—Contn. sheet.

25646

5

35[illegible]8

23 24

89-23

C. O. 46—R

WD 0103—GPB—10,000—29—8-21

Please address all future communications to the Comptroller to the Govt. of H. H. the Maharaja of Mysore.
In reply to this Comn. please refer to

No. 309 Pen 52

OFFICE OF THE COMPTROLLER TO THE
GOVERNMENT OF HIS HIGHNESS THE
MAHARAJA OF MYSORE.

Dated, Bangalore, the 17th March 1924

FROM

T. SATYARAJ CHETTY ESQ., B.A.,
Comptroller to the Government of
His Highness the Maharaja of Mysore.

To

Rajakaryaprasaktha
M. N. Krishna Rao Esq., B.A.,
Secretary to the Government of Mysore,
Financial Department, Bangalore.

SIR,

I have the honour to submit herewith for orders of Government, a copy of letter dated 20th February 1924 together with its enclosures in original (the final report and the two tables) regarding the commutation of pensions, received from Mr. George King, Actuary, London.

I have the honor to be,
Sir,
Your most obedient servant,

T. Satyarajchetty
Comptroller.

CV/17-3

19/3

Letter dated 20th February 1924 from Mr.George King, F.I.A., F.F.
Consulting Actuary, 15, Walbrook, London, to the Comptroller in
Mysore, Bangalore.

=====

Commutation of Pensions.

I have now the honour to enclose herewith my formal report with my recommendations on the matter referred to me, and I trust it will prove satisfactory to the Mysore Government. I shall be glad to hear from you at your leisure with your views, and, should you wish any further information, I shall try to give it to you, I have given to the whole matter long and anxious thought, and I have tried to hold the balance even between the Government, which pays the commutation values, and the pensioners themselves.

I do not know whether you will have the report printed, but I hope you will not consider it presumptious on my part if I say that probably it should not be published, as the public have no concern in all the explanations which were necessary regarding the steps taken to obtain really accurate mortality tables. Should, however, you have copies printed, I should esteem it a great favour if you would send me a few.

If and when the report is accepted by your Government, I would also suggest that it would be courteous to send a copy to the British India Office here, who were so very kind in giving information.

I have here a very large mass of cards, but in great part they are now quite useless, and I imagine you will not wish to retain them. If so, I would on your giving me the necessary instructions have all these obsolete cards destroyed here, but if you prefer it, I shall of course forward them to you. The only cards which I think it really necessary to retain are the 4618 mentioned in Par.12 of my report, as these may be required again should at any future time further investigations have to be made. When you desire it, I will return you all these cards, done up in suitable packets according to their kind.

" Copy "

M Deva Raj

Superintendent, Comptroller's Office,
Records Section.

CV/17-3

GEORGE KING, F.I.A., F.F.A.
CONSULTING ACTUARY.
Telephone No 3595 Central.
Telegraphic Address,
"ACTUELLE, PHONE, LONDON."

30/

15, Walbrook,
London, E.C.4.

20 Feb. 1924.

T. Satyaraj Chetty, Esq., B.A.,
Comptroller to the Government of
His Highness the Maharaja of Mysore.

1298
R 1924

Vide no. 309 of 17.3.24 to F. Secy.

Sir,

Commutation of Pensions.

1 I have now the honour to enclose herewith my formal report with my recommendations on the matter referred to me, and I trust it will prove satisfactory to the Mysore Government. I shall be glad to hear from you at your leisure with your views, and, should you wish any further information, I shall try to give it to you. I have given to the whole matter long and anxious thought, and I have tried to hold the balance even between the Government, which pays the commutation values, and the pensioners themselves.

2 I do not know whether you will have the report printed, but I hope you will not consider it presumptious on my part if I say that probably it should not be published, as the public have no concern in all the explanations which were necessary regarding the steps taken to obtain really accurate mortality tables. Should, however, you have copies printed, I should esteem it a great favour if you would send me a few.

3 If and when the report is accepted by your Government, I would also suggest that it would be courteous to send a copy to the British India Office here, who were so very kind in giving information.

I have here a very large mass of cards, but in great part they are now quite useless, and I imagine you will not wish to retain them. If so, I would on your giving me the necessary instructions have all these obsolete cards destroyed here, but if you prefer it, I shall of course forward them to you. The only cards which I think it really necessary to retain are the 4613 mentioned in Par. 12 of my report, as these may be required again should at any future time further investigations have to be made. When you desire it, I will return you all these cards, done up in suitable packets according to their kind.

I remain, Sir,
Your obedient Servant,

George King

~~3504~~ 8

GOVERNMENT OF HIS HIGHNESS THE MAHARAJA OF MYSORE.

1923-24

Sta

In reply please
refer to
No. Pen.313.

Ext. (PTO)

Comptroller's Office, Bangalore,
8-9-23
Dated the 17th March 1924.

Very [illegible] 17/3/24

Rajakaryaprasaktha
M. N. Krishna Rao Esq., B.A.,
Financial Secretary to the
Government of Mysore, Bangalore.

Sir,

In continuation of this office letter No. 309/Pen. of even date, forwarding for orders the formal report and the commutation table received from Mr. George King, Consulting Actuary, London, I have the honor to enclose herein a copy of his letter dated 28th February 1924, claiming a fee of £162-15-0 and to request that early orders of Government may be kindly obtained so that arrangements may be made by the next mail for payment of the amount.

I have the honor to be,
Sir,
Your most obedient servant,

T. Satyanarayan[illegible]
Comptroller.

[illegible]

SAM

N.V.S. 18/3

7

A

Letter dated 28th February 1934 from Mr. George King, F.I.A. F.F.A., London, to the Comptroller, Mysore Government, Bahgalore

---

COMMUTATION OF PENSIONS.

I wrote you on 20th instant enclosing my report, but the Indian mail last week was held up here by the dock strike, and I think it quite possible that my report will be going out to Mysore by the mail this week, and under these circumstances I refrain from sending you a duplicate until next week.

Mean~~while~~time, I write you regarding the costs of the enquiry. From the very long correspondence we have had, and the immense amount of work put into various schemes, the cost has been a good deal more than I should have expected. I have gone into the matter very carefully, and I find that the margin left for myself will be but small if I charge you for a fee of one hundred and fifty five guineas, £162-15-0. I hope you will not consider this to be too great, because really it is very moderate under the circumstances, and I think you will see this for yourself. You must have had a very great deal of work on your side also. I should therefore esteem it a favour if at your convenience you would let me have a remittance for that amount.

"COPY"

Superintendent, Records.

10 3 '04

G. R. S. G/33]

GENERAL AND REVENUE SECRETARIAT.

(~~Continuation sheet draft form.~~)

Proceedings

Read :- Letter No. Pen. 313 D/ 17/3/24 from the Comptr. forwarding for orders the ~~pension appli-cation~~ formal report of the pension commutation table received from Mr. George King, consulting Actuary, London.

(To be printed in extenso)

Order :- 5376/S&a 89-23-3 d/27-3-1924.

Govt. are pleased to ~~direct that~~ approve ~~of the~~ of the new table ~~may be~~ adopted when commutation of pension is resumed.

The ~~A~~ fee of ₹ 162-15-0 ~~is sanctioned to~~ claimed by Mr. George King is sanctioned ~~for the service rendered by him~~. The Comptroller is requested to arrange for payment. An additional grant equivalent to the amount to be paid is sanctioned for the purpose

Fin. Secy.

The Comptr. Mem

P. 10/1

Ef- mad 26/3/24

Prin. & Secy. Mr. S.R.

mad 27/3 S&a 89-23-3

WD 2230—GPB—1,00,000—28-7-20

A. & C. to U.S.R.
V Edition

Page 247 . App. 5. — Annexure.

Substitute the following for this
for the existing rates under
the head "Whole Life" —
ages 62 to 68 inclusive; —

Age at
Commutation

Present Age
(+ flag V.)

Whole Life

Replace ~~the foregoing~~ the present table by the following.

26.3.24

Fwd. Secy

No 5397 dated 29.3.24 68

i/c copy to Compt.

8 · 0 · 9'

PROCEEDINGS OF THE GOVERNMENT OF HIS HIGHNESS THE MAHARAJA OF MYSORE.

--:0:--

OFFICE OF THE SUPERINTENDENT
No. 6579
21-3-24
BANGALORE.
GOVERNMENT PRESS.

A & C Service Regulation

R e

Letter No. Pen. 313 dated 17th March 1924 from the Comptroller forwarding for orders the report and the pension commutation table received from Mr. George King, consulting Actuary, London.

(To be printed in extenso)

***

Order No. F1 5376/S. R 89-23-3 dated 27.3.24

Government are pleased to approve of the new table for adoption when commutation of pension is resumed.

The fee of £ 162-15-0 claimed by Mr. George King is sanctioned. The Comptroller is requested to arrange for payment An additional grant equivalent to the amount to be paid is -- sanctioned for the purpose.

Sd/ M. N. Krishna Rao

Financial Secretary to Government.

Ind 1954

Prog to desp

Fr

To

The Comptroller, Mysore Government.

Fl No 3395 dated 29-3-24
Encl

Press copy. The enclosure may kindly ~~[illegible]~~ be returned early very carefully. A proof copy may kindly be sent before finally printing copies
G. O.

Very urgent

For Financial Secretary

DVGR. 2.

WDB 30/3

Send proof
Keep copy clean

Issued with L. No 5838 dated

GEORGE KING, F.I.A., F.F.A.
CONSULTING ACTUARY.
Telephone Nº 3595 Central.
Telegraphic Address.
"ACTUELLE, CANNON, LONDON."

15, Walbrook.
London. E.C.

20 Feb. 1924.

To T. Satyaraj Chetty, Esq., B.A.,
Comptroller to the Government of
His Highness the Maharaja of Mysore.

Sir,

Commutation of Pensions.

1. By his letter of 19th November 1920 the Financial Secretary of the Mysore Government did me the honour of inviting me to investigate the system under which members of Government Services are permitted to commute a portion of their pensions, the classes of Government Servants referred to being those who are members of the Insurance Fund.

2. With his letter he sent me a copy of the table followed in calculating the commuted values, and he informed me that the table is the same as that adopted by the British Government of India for certain classes of their own servants.

3. It being important to know the basis of the Mysore system which was to be investigated, I ventured to write to the Secretary to the India Office in London, and my application was received with the greatest courtesy, for which I am extremely grateful.

4. It would seem that the table of the British Indian Government was calculated at 3½% interest, and that, as to the rates of mortality, different sets of statistics were employed for different parts of the table, but that in preponderating proportion they were derived from the records of Military Service Funds; and I was told that the India Office has not any statistics suitable for our present purposes. It was evident, therefore, that I should have to make a fresh start, and to use statistics derived from the Civil Services of the Mysore State itself.

5. Here I wish to make it clear that the conditions prevailing in the Services of the British Indian Government differ so materially

from those prevailing in the Mysore Services, that comparison is not possible, and therefore it must be distinctly understood that the results which I have now the honour to submit have no bearing whatever on the British Indian Government system.

6. In Mysore pensions are granted on retirement from the Service, and run thereafter for the whole of life. Under the rules a portion of the pension, on certain conditions which do not concern us here, may be commuted for a lump payment, and the commutation may be either for the whole of life, in which case only the reduced pension is payable for life; or it may be for a fixed term of years, in which case the reduced pension is paid during that term only, and, on the expiry of the term, the original full pension becomes payable again, and runs for the remainder of life. The investigation has been made with a view to ascertain the proper lump payment to be made to the pensioner when commutation is effected for the whole of life; and as to the further question of the lump sums to be paid for temporary commutation, the instructions given to me in a letter from Mysore dated 6th September 1923 are that that question does not come within the limits of the present enquiry.

7. As stated above, instructions were first given to me in a letter from Mysore dated 19th November 1920, and much time has since elapsed, but that has been unavoidable. There has been a long correspondence, and, to secure accuracy in the particulars, parcels of cards have been passing backwards and forwards throughout these years between Mysore and London. Moreover, before the plan finally decided upon was settled, two abortive attempts were made to arrive at correct rates of mortality, and this involved extensive calculations and much labour. It is needless now to go into details, and I need say only, that an effort was made in the first place to prepare a mortality table from certain statistics supplied relating to the years 1915 to 1919 inclusive, but these were found to be so defective as to be useless. It was then resolved to try to construct a table to embrace the experience of Mysore pensioners from the commencement, and cards, to the number of 8,324 in all, including 26 for females,

3

were sent to me from your side, and again a great deal of labour was expended, but to no purpose, because most unfortunately your records of pension payments made previous to 31st December 1910 had been destroyed, and you could supply information only in respect of those made from 1st January 1911 onwards.

8. It was therefore resolved finally to construct mortality tables for the ten years from 1st July 1911 to 30th June 1921, and to include all pensioners who had entered on their pensions previous to 1st July 1911, and who were alive on that date, and also those who entered on their pensions between 1st July 1911 and 30th June 1921. The particulars supplied in the case of each of these pensioners are known, except as regards one small point, to be correct, and the resulting mortality tables can be accepted without any misgiving. The one small point mentioned above is, that in the case of exactly 300 cards the date of death was not ascertainable, but only the date of last payment of pension during the ten years; and that in these 30 cases the date of last payment of pension was more or less remote. The pensioners had simply disappeared, and could not be traced; but unquestionably they must have died, or otherwise their pensions would have been claimed. In the construction of the tables, therefore, it was assumed that in these 300 cases death occurred three months after last payment of pension. Any error that this assumption involves must be very minute.

9. Only 26 cards for female pensioners were received, and as there were so few they were laid aside, and the appended mortality tables relate only to males, but that is of no consequence, because in the matter of commutation of pensions the sexes may be treated alike without injustice to anyone.

10. In the Insurance Fund the normal pension age is 55, but some members remain longer in active service, and a few are pensioned at younger ages. These early pensions are granted for two reasons. There may be reorganization of the staff, and the services of some of the members may be required no longer, and they are retired on pension irrespective of health. There are but few of these. The other cause of early pensions is when a member

of the staff breaks down permanently in health, in which case he is retired on pension. The mortality among this class of pensioners is heavy.

11. The following figures may be of interest as showing the proportions of members who are retired on pensions at different ages. They relate to the entrants on pension during the ten years 1st July 1911 to 30th June 1921:-

Below age 55	306
Aged 55 to 64	1745
Aged 65 and over	44
	2095

It will be observed that it is during the ten years of life, 55 to 64, that the great majority of pensions are taken.

12. The following are the data on whichthe appended mortality tables have been based:-

Survivors on 30 June 1911 of those who retired on pensions previous to that date	2,523
Entrants on pension during the ten years from 1st July 1911 to 30 June 1921	2,095
Total	4,618

Of these, 1783 died, and 2835 remained alive on 30th June 1921.

13. The great bulk of the observations occursbetween the ages 40 and 79. Below age 40 there were only 11 pensioners, and none of them died. These 11 pensioners enjoyed between them 24years of life during the ten years. On account of this scarcity of the data, I have not attempted to carry on the mortality tables below age 40.

14. Above age 80 also the observations were very scanty, all the pensioners at these high ages having enjoyed between them only 568 years of life during the ten years, and there were 110 deaths. This afforded a guide to the rate of mortality, but not sufficient in itself. It was therefore compared with other tables, and thereby the appended table was carried on to age 104, but this portion of

the table is more or less arbitrary. That, however, does not affect the rates of commutation.

15. Originally two investigations were made intothe mortality experience, namely, the first, including all the pensioners of the ten years no matter at what age the pension commenced, and second, including only those who became pensioners at the normal age of 55 or later, and omitting all those who went on the pension list before reaching the age of 55. A third investigation was afterwards made, to include only the pensioners who entered on pension before age 55. The table including everyone is really not required, and therefore I append as Table I of the appendix the two mortality tables mentioned above, namely,

A. that relating to pensioners who entered at age 55 or over, and
B. that relating to those who entered before age 55.

I have already explained above in some detail the nature of these tables. It will be observed that the entrants below age 55 suffer throughout from a high mortality, and that table has not been referred to in calculating the rates of commutation, because when a pension is commuted, the pensioner has to prove good health.

Commutation of Pensions.

16. It now remains to explain how the new suggested values for the commutation of pensions have been arrived at. The Mysore Experience itself was not directly used, but it was compared most carefully with other tables, and it was found that the British Offices Annuity Table Males was in many ways similar to it, although until the old ages it showed a lighter rate of mortality. That being so, I adopted the British Offices Experience, taking interest at 5%, and this is equivalent to the Mysore Table with interest somewhere about 4¼%. Therefore, the new suggested commutation values are practically based upon the Mysore Experience Mortality Table A with interest at 4¼%. This point has had my very careful thought, and I feel convinced that in proposing the new suggested values I am dealing fairly with the Mysore Government itself, and with its pensioners. The Mysore Government has to find the money for the

6

commuted pensions, and is entitled to a reasonable rate of interest on its advances, but it wants to be generous with its employees. At the present time 4¼% is really below the market rate of interest, but, all the same, I feel sure that the Government will be glad to give its employees this small advantage. Had a higher rate been used, the reduction in the commutation values at the younger ages would have been larger, and I do not think that the Government wishes to reduce these values too far. On the other hand, the pensioners themselves will be treated generously should the new rates be adopted, and that I feel sure will give satisfaction, and is what the Government desires. As explainedabove, I have not been able to carry the table below age 40, but very few quotations will be required at these young ages, and they can be specially made. I imagine that your own Department can work out the figures without difficulty.

17. There has been long and unavoidable delay in sending in this formal report, but on 15th August last I had the honour of forwarding to you a preliminary statement giving my recommendations, which you will observe have not been changed.

I have the honour to remain,

Your obedient Servant,

George King

7

Table I

Showing the Rates of Mortality derived from the records of the Pensioners of the Mysore Government in respect of
Mortality Table A, those who entered on pension at age 55 or ove
and Mortality Table B, those who entered on pension below the age of 55.

	Mortality Table A.		Mortality Table B.
Age	Rate of Mortality	Age	Rate of Mortality
55	.03191	40	.02683
6	.03278	1	.02705
7	.03365	2	.02727
8	.03452	3	.02749
9	.03539	4	.02771
60	.03626	45	.02793
1	.03713	6	.02815
2	.03801	7	.02837
3	.04441	8	.02858
4	.05082	9	.03377
65	.05717	50	.03810
6	.06337	1	.04134
7	.06934	2	.04322
8	.07499	3	.04351
9	.08024	4	.04196
70	.08552	55	.03986
1	.09126	6	.03846
2	.09787	7	.03903
3	.10603	8	.04225
4	.11501	9	.04727
75	.12244	60	.05309
6	.13029	1	.05869
7	.13870	2	.06306
8	.14644	3	.06543
9	.15025	4	.06647
80	.15310	65	.06734
1	.15538	6	.06921
2	.15750	7	.07325
3	.15663	8	.08059
4	.15251	9	.09046
85	.14936	70	.10115
6	.15139	1	.11098
7	.16280	2	.11816
8	.18279	3	.11892
9	.21056	4	.11924
90	.24531		
1	.28624		
2	.33259		
3	.34875		
4	.36610		
95	.39165		
6	.41835		
7	.44618		
8	.47502		
9	.50478		
100	.53536		
1	.56657		
2	.59825		
3	.63019		
4	.90000		

Table II.

Present Value of a Monthly Payment of R.1 lasting throughout life, and showing the Commuted Values

A. which have been hitherto used, and
B. the new suggested values.

Age at Commutation	Rates hitherto in use.	New Suggested Rates.	Age at Commutation	Rates hitherto in use	New Suggested Rates.
40	188.0	168.4	65	99.6	97.5
1	185.3	166.3	6	95.8	94.2
2	182.3	164.1	7	91.9	90.9
3	179.3	161.8	8	88.1	87.6
4	176.2	159.5	9	84.2	84.2
45	172.9	157.1	70	80.5	80.5
6	169.8	154.6	1	76.8	76.8
7	166.6	152.1	2	73.1	73.1
8	163.1	149.5	3	69.7	69.7
9	159.6	146.8	4	66.2	66.2
50	156.4	144.1	75	62.9	62.9
1	153.1	141.3	6	59.8	59.8
2	149.4	138.4	7	56.6	56.6
3	145.8	135.5	8	53.8	53.8
4	142.2	132.6	9	50.9	50.9
55	138.6	129.5	80	48.2	48.2
6	134.9	126.5	1	45.6	45.6
7	131.2	123.4	2	43.2	43.2
8	127.3	120.2	3	40,8	40.8
9	123.4	117.1	4	38.5	38.5
60	119.5	113.9	85	36.4	36.4
1	115.4	110.6	6	34.3	34.3
2	111.5	107.4	7	32.4	32.4
3	107.5	104.1	8	30.5	30.5
4	103.6	100.8	9	28.6	28.6
			90	26.5	26.5
			1	24.5	24.5
			2	22.0	22.0
			3	19.3	19.3
			4	16.6	16.6

19

THE SUPERINTENDENT GOVERNMENT PRESS BANGALORE. No. Date

[illegible] CORRECTIONS TO MYSORE SERVICE REGULATIONS.

--:0:--

V. Edition.

Appendix O.--Annexure.

Replace the present table by the following:-

Present Value of a Monthly Payment of R.1 lasting throughout life, and showing the Commuted Values.
~~A. Which have been hitherto used, and~~
~~B. the new suggested values.~~

Age at Commutation	Rates hitherto in use	~~New~~ ~~Suggested~~ Rates.	Age at Commutation	Rates hitherto in use.	~~The~~ ~~Suggested~~ Rates.
40	[illegible]	168.4	65	[illegible]	97.5
1	[illegible]	166.7	6	95.8	94.2
2	[illegible]	164.1	7	91.9	90.9
3	[illegible]	161.8	8	88.1	87.6
4	[illegible]	159.5	9	84.2	84.2
45	[illegible]	157.1	70	80.5	80.5
6	[illegible]	154.6	1	76.8	76.8
7	[illegible]	152.1	2	73.1	73.1
8	[illegible]	149.5	3	69.7	69.7
9	[illegible]	146.8	4	66.2	66.2
50	[illegible]	144.1	75	62.9	62.9
1	[illegible]	141.3	6	59.8	59.8
2	[illegible]	138.4	7	56.6	56.6
3	[illegible]	135.5	8	53.8	53.8
4	[illegible]	[illegible]	9	50.9	50.9
55	[illegible]	129.5	80	48.2	48.2
6	[illegible]	126.5	1	45.6	45.6
7	[illegible]	123.4	2	43.2	43.2
8	127.7	120.2	3	40.8	40.8
9	123.4	117.1	4	38.5	38.5
60	119.5	113.9	85	36.4	36.4
1	115.4	110.6	6	34.3	34.3
2	111.5	107.4	7	32.4	32.4
3	107.6	104.1	8	30.5	30.5
4	103.6	100.8	9	28.6	28.6
			90	26.5	26.5
			1	24.5	24.5
			2	22.0	22.0
			3	19.3	19.3
			4	16.6	16.6

(No. 14 D, 28-3-[illegible])

Y/5-396 dated 29.3.26

Sd/ M. N. Krishna Rao

FINANCIAL SECRETARY TO GOVERNMENT.

The Superintendent, Govt Printing:
30/3 Issue of A.C. to the Mysore Service
1/4 Regulations. Two clean proof
sent early.

S. O.

Government of His Highness the Maharaja of Mysore.

FINANCIAL DEPARTMENT.

G. O. No. Fl. 5376—S. A. 89-23-3, dated 27th March 1924.

Commutation of Pension.

Revises the table of rates for ——.

READ—

Letter No. Pen. 313, dated 17th March 1924, from the Comptroller forwarding for orders the report and the pension commutation table received from Mr. George King, Consulting Actuary, London.

(To be printed in extenso)

ORDER No. Fl. 5376—S. A. 89-23-3, DATED 27TH MARCH 1924.

Government are pleased to approve of the new table for adoption when commutation of pension is resumed.

The fee of £ 162-15-0 claimed by Mr. George King is sanctioned. The Comptroller is requested to arrange for payment. An additional grant equivalent to the amount to be paid is sanctioned for the purpose.

M. N. KRISHNA RAO,
Financial Secretary to Government.

To—The Comptroller, Mysore Government.

Exd.—P. S. R. N.

No. Fl. 5376—S. A. 89-23-3, dated 27th March 1924.

To

T. SATYARAJ CHETTY, Esq., B.A.,
Comptroller to the Government of His
Highness the Maharaja of Mysore.

Sir,

Commutation of Pensions.—By his letter of 19th November 1920, the Financial Secretary of the Mysore Government did me the honor of inviting me to investigate the system under which members of Government Services are permitted to commute a portion of their pensions, the classes of Government servants referred to being those who are members of the Insurance Fund.

2. With his letter he sent me a copy of the table followed in calculating the commuted values, and he informed me that the table is the same as that adopted by the British Government of India for certain classes of their own servants.

3. It being important to know the basis of the Mysore system which was to be investigated, I ventured to write to the Secretary to the India Office in London, and my application was received with the greatest courtesy, for which I am extremely grateful.

4. It would seem that the table of the British Indian Government was calculated at 3¼ per cent interest, and that, as to the rates of mortality, different sets of statistics were employed for different parts of the table, but that in preponderating proportion they were derived from the records of Military Service Funds; and I was told that the India Office has not any statistics suitable for our present purposes. It was evident, therefore, that I should have to make a fresh start, and to use statistics derived from the Civil Services of the Mysore State itself.

5. Here I wish to make it clear that the conditions prevailing in the Services of the British Indian Government differ so materially from those prevailing in the Mysore Services, that comparison is not possible, and therefore it must be distinctly understood that the results which I have now the honor to submit have no bearing whatever on the British Indian Government system.

6. In Mysore pensions are granted on retirement from the Service, and run thereafter for the whole of life. Under the rules a portion of the pension, on certain conditions which do not concern us here, may be commuted for a lump payment, and the commutation may be either for the whole of life, in which case only the reduced pension is payable for life; or it may be for a fixed term of years, in which case the reduced pension is paid during that term only, and, on the expiry of the term, the original full pension becomes payable again, and runs for the remainder of life. The investigation has been made with a view to ascertain the proper lump payment to be made to the pensioner when commutation is effected for the whole of life; and as to the further question of the lump sums to be paid for temporary commutation, the instructions given to me in a letter from Mysore, dated 6th September 1923, are that that question does not come within the limits of the present enquiry.

7. As stated above, instructions were first given to me in a letter, from Mysore, dated 19th November 1920, and much time has since elapsed, but that has been unavoidable. There has been a long correspondence and, to secure accuracy in the particulars, parcels of cards have been passing backwards and forwards throughout these years between Mysore and London. Moreover, before the plan finally decided upon was settled, two abortive attempts were made to arrive at correct rates of mortality, and this involved extensive calculations and much labour. It is needless now to go into details, and I need say only, that an effort was made in the first place to prepare a mortality table from certain statistics supplied relating to the years 1915 to 1919 inclusive, but these were found to be so defective as to be useless. It was then

resolved to try to construct a table to embrae the experience of Mysore pensioners from the commencement, and cards, to the number of 8,324 in all, including 26 for females, were sent to me from your side, and again a great deal of labour was expended, but to no purpose, because most unfortunately your records of pension payments made previous to 31st December 1910 had been destroyed, and you could supply information only in respect of those made from 1st January 1911 onwards.

8. It was therefore resolved finally to construct mortality tables for the ten years from 1st July 1911 to 30th June 1921, and to include all pensioners who had entered on their pensions previous to 1st July 1911, and who were alive on that date, and also those who entered on their pensions between 1st July 1911 and 30th June 1921. The particulars supplied in the case of each of these pensioners are known, except as regards one small point, to be correct; and the resulting mortality tables can be accepted without any misgiving. The one small point mentioned above is, that in the case of exactly 300 cards the date of death was not ascertainable, but only the date of last payment of pension during the ten years, and that in these 300 cases the date of last payment of pension was more or less remote. The pensioners had simply disappeared, and could not be traced; but unquestionably they must have died, or otherwise their pensions would have been claimed. In the construction of the tables, therefore, it was assumed that in these 300 cases death occurred three months after last payment of pension. Any error that this assumption involves must be very minute.

9. Only twenty six cards for female pensioners were received, and as there were so few they were laid aside, and the appended mortality tables relate only to males, but that is of no consequence, because in the matter of commutation of pensions the sexes may be treated alike without injustice to any one.

10. In the Insurance Fund the normal pension age is fifty five, but some members remain longer in active service, and a few are pensioned at younger ages. These early pensions are granted for two reasons. There may be reorganization of the staff, and the services of some of the members may be required no longer, and they are retired on pension irrespective of health. There are but few of these. The other cause of early pensions is when a member of the staff breaks down permanently in health, in which case he is retired on pension. The mortality among this class of pensioners is heavy.

11. The following figures may be of interest as showing the proportions of members who are retired on pensions at different ages. They relate to the entrants on pension during the ten years 1st July 1911 to 30th June 1921:—

Below age 55	306
Aged 55 to 64	1,745
Aged 65 and over	44
Total ...	2,095

It will be observed that it is during the ten years of life, 55 to 64, that the great majority of pensions are taken.

12. The following are the data on which the appended mortality tables have been based:—

Survivors on 30th June 1911 of those who retired on pensions previous to that date.	2,523
Entrants on pension during the ten years from 1st July 1911 to 30th June 1921.	2,095
Total ...	4,618

Of these 1,783 died, and 2,835 remained alive on 30th June 1921.

13. The great bulk of the observations occurs between the ages forty and seventy nine. Below age forty there were only eleven pensioners, and none of them died. These eleven pensioners enjoyed between them twenty four years of life during the ten years. On account of this scarcity of the data, I have not attempted to carry on the mortality tables below age forty.

NO. FL. 5376—S. A. 89-23-3, DATED 27TH MARCH 1924.

14. Above age eighty also the observations were very scanty, all the pensioners at these high ages having enjoyed between them only 568 years of life during the ten years, and there were 110 deaths. This afforded a guide to the rate of mortality, but not sufficient in itself. It was therefore compared with other tables, and thereby the appended table was carried on to age 104, but this portion of the table is more or less arbitrary. That, however, does not affect the rates of commutation.

15. Originally two investigations were made into the mortality experience, namely, the first, including all the pensioners of the ten years no matter at what age the pension commenced, and second, including only those who became pensioners at the normal age of 55 or later, and omitting all those who went on the pension list before reaching the age of 55. A third investigation was afterwards made, to include only the pensioners who entered on pension before age 55. The table including everyone is really not required, and therefore I append as Table I of the appendix the two mortality tables mentioned above, namely,

A. that relating to pensioners who entered at age 55 or over, and

B. that relating to those who entered before age 55.

I have already explained above in some detail the nature of these tables. It will be observed that the entrants below age 55 suffer throughout from a high mortality, and that table has not been referred to in calculating the rates of commutation, because when a pension is commuted, the pensioner has to prove good health.

16. *Commutation of Pensions.*—It now remains to explain how the new suggested values for the commutation of pensions have been arrived at. The Mysore experience itself was not directly used, but it was compared most carefully with other tables, and it was found that the British Offices Annuity Table Males was in many ways similar to it, although until the old ages it showed a lighter rate of mortality. That being so, I adopted the British Offices Experience, taking interest at 5 per cent and this is equivalent to the Mysore Table with interest somewhere about 4¼ per cent. Therefore, the new suggested commutation values are practically based upon the Mysore Experience Mortality Table A with interest at 4¼ per cent. This point has had my very careful thought, and I feel convinced that in proposing the new suggested values I am dealing fairly with the Mysore Government itself, and with its pensioners. The Mysore Government has to find the money for the commuted pensions, and is entitled to a reasonable rate of interest on its advances, but it wants to be generous with its employees. At the present time 4¼ per cent is really below the market rate of interest, but, all the same, I feel sure that the Government will be glad to give its employees this small advantage. Had a higher rate been used, the reduction in the commutation values at the younger ages would have been larger, and I do not think that the Government wishes to reduce these values too far. On the other hand, the pensioners themselves will be treated generously should the new rates be adopted, and that I feel sure will give satisfaction, and is what the Government desires. As explained above, I have not been able to carry the table below age 40, but very few quotations will be required at these young ages, and they can be specially made I imagine that your own Department can work out the figures without difficulty.

17. There has been long and unavoidable delay in sending in this formal report, but on 15th August last I had the honour of forwarding to you a preliminary statement giving my recommendations, which you will observe have not been changed.

I have the honour to remain,
Your obedient servant,
GEORGE KING.

No. Fl. 5376—S. A. 89-23-3, dated 27th March 1924.

Table I.

Showing the Rates of Mortality derived from the records of the Pensioners of the Mysore Government in respect of Mortality Table A, those who entered on pension at age 55 or over and Mortality Table B, those who entered on pension below the age of 55:—

Mortality Table A.		Mortality Table B.	
Age	Rate of Mortality	Age	Rate of Mortality
55	·03191	40	·02683
6	·03278	1	·02705
7	·03365	2	·02727
8	·03452	3	·02749
9	·03539	4	·02771
60	·03626	45	·02793
1	·03713	6	·02815
2	.03801	7	·02837
3	·04441	8	·02858
4	·05082	9	·03377
65	·05717	50	·03810
6	·06337	1	·04134
7	·06934	2	·04322
8	·07499	3	·04351
9	·08024	4	·04196
70	·08552	55	·03986
1	·09126	6	·03846
2	·09787	7	·03903
3	·10603	8	·04225
4	·11501	9	·04727
75	·12244	60	·05309
6	·13029	1	·05869
7	·13870	2	·06306
8	·14644	3	·06543
9	·15025	4	.06647
80	·15310	65	·06734
1	·15538	6	·06921
2	·15750	7	·07325
3	·15663	8	·08059
4	·15251	9	·09046
85	·14936	70	·10115
6	·15139	1	·11095
7	·16280	2	·11816
8	·18279	3	·11892
9	·21056	4.	·11924
90	·24531		
1	·28624		
2	·33259		
3	·34875		
4	·36610		
95	·39165		
6	·41835		
7	·44618		
8	·47502		
9	·50478		
100	·53536		
1	·56657		
2	·59825		
3	·63019		
4	·90000		

25

No. Fl. 5376—S. A. 89-23-3, dated 27th March 1924.

TABLE II.

Present value of a monthly payment of R. 1 lasting throughout life, and showing the Commuted Values.

A. which have been hitherto used, and

B. the new suggested values.

Age at Commutation	Rates hitherto in use.	New Suggested Rates	Age at Commutation	Rates hitherto in use	New Suggested Rates
40	188·0	168·4	65	99·6	97·5
1	185·3	166·3	6	95·8	94·2
2	182·3	164·1	7	91·9	90·9
3	179·3	161·8	8	88·1	87·6
4	176·2	159·5	9	84·2	84·2
45	172·9	157·1	70	80·5	80·5
6	169·8	154·6	1	76·8	76·8
7	166·6	152·1	2	73·1	73·1
8	163·1	149·5	3	69·7	69·7
9	159·6	146·8	4	66·2	66·2
50	156·4	144·1	75	62·9	62·9
1	153·1	141·3	6	59·8	59·8
2	149·4	138·4	7	56·6	56·6
3	145·8	135·5	8	53·8	53·8
4	142·2	132·6	9	50·9	50·9
55	138·6	129·5	80	48·2	48·2
6	134·9	126·5	1	45·6	45·6
7	131·2	123·4	2	43·2	43·2
8	127·3	120·2	3	40·8	40·8
9	123·4	117·1	4	38·5	38·5
60	119·5	113·9	85	36·4	36·4
1	115·4	110·6	6	34·3	34·3
2	111·5	107·4	7	32·4	32·4
3	107·5	104·1	8	30·5	30·5
4	103·6	100·8	9	28·6	28·6
			90	26·5	26·5
			1	24·5	24·5
			2	22·0	22·0
			3	19·3	19·3
			4	16·6	16·6

G. R. S. V1—G/32]

SUBJECT……………………………………………

……………………………………………

……………………………………………

Diary No. of letter replied to

General and Revenue Secretariat
( )
, *the* 191 .

Date of issue 12. 6. 24

Signed by Mr M. A. Rangacha

Section S. A

File No. 89-23-

Serial No. 4

No. Fl 6486

To George King - Esq. F.I
Consulting Actuary,
15 Walbrook Londo

Sir,

With refce. to your l
d 20/2/2- to the Comp
to Govt., I am directed to forwa
herewith 10 printed co
of your Report on the c
mmutation of Pensions i

Two copies are he
separately forwarded t

over.

the Indian Office as desired
[illegible]

I have etc.

4. I am to convey to you the thanks of the Govt of Mysore for complying with their request and for the valuable advice given in the report.

~~Dft~~ [illegible] 7.6.24
[illegible] 6/6/24

Fl 6787 dated 12.6.24

Copy to ~~Finance~~ Compli Secy for information

List of enclosures.

Copied by

Examined by

G. R. S. VI—G/32]

SUBJECT..

....

....

Diary No. of letter replied to ________

General and Revenue Secretariat
( )
, *the* 191 .

Date of issue 7 - 8 - 24

Signed by Mr M. N. Krishna Rao

Section S & a
File No. 89-23
Serial No. 7

No. Pol. 142 G/3

To The Secy. to the Resident

Sir,

I am desired to forward herewith 2 copies of the Report on commutation of Pensions in Mysore by Mr. George King, consulting Actuary, London, & to request that the same may kindly be transmitted to the India Office in London with the intimation that they ~~publication is~~ are sent

over.

29

at the instance of the Actuary ~~who states that his application to the India Office in connection with the compilation of the Tables was received with the greatest courtesy.~~

as ~~Stated~~ proposed in his letter of 20/[illegible]/24 an extract from which is enclosed.

ç N
Para 3 [illegible]

I have etc.

Sd/ [illegible]
Finl. Secy.

[illegible] 6/12/24

List of enclosures.

Copied by

Examined by